Tower Legalities

A ham-attorney talks about towers, PRB-1 and how to approach your local building inspector about getting a building permit. Take it one step at a time and ensure success by following a few basic rules.

BY WYLAND DALE CLIFT*, NA1L

Is a tower right for you? If so, how high and how big? Ham radio operators make all kinds of equipment decisions based on their individual circumstances. Budgetary constraints, individual preferences for DXing, VHF, packet radio, or other sub-specialties, and even the amount of time available to devote to the hobby—all these things form a basis for decisions about equipment. But for decisions about a particular kind of equipment, namely towers, a very important factor gets thrown into the equation. That factor is the local building and zoning regulations.

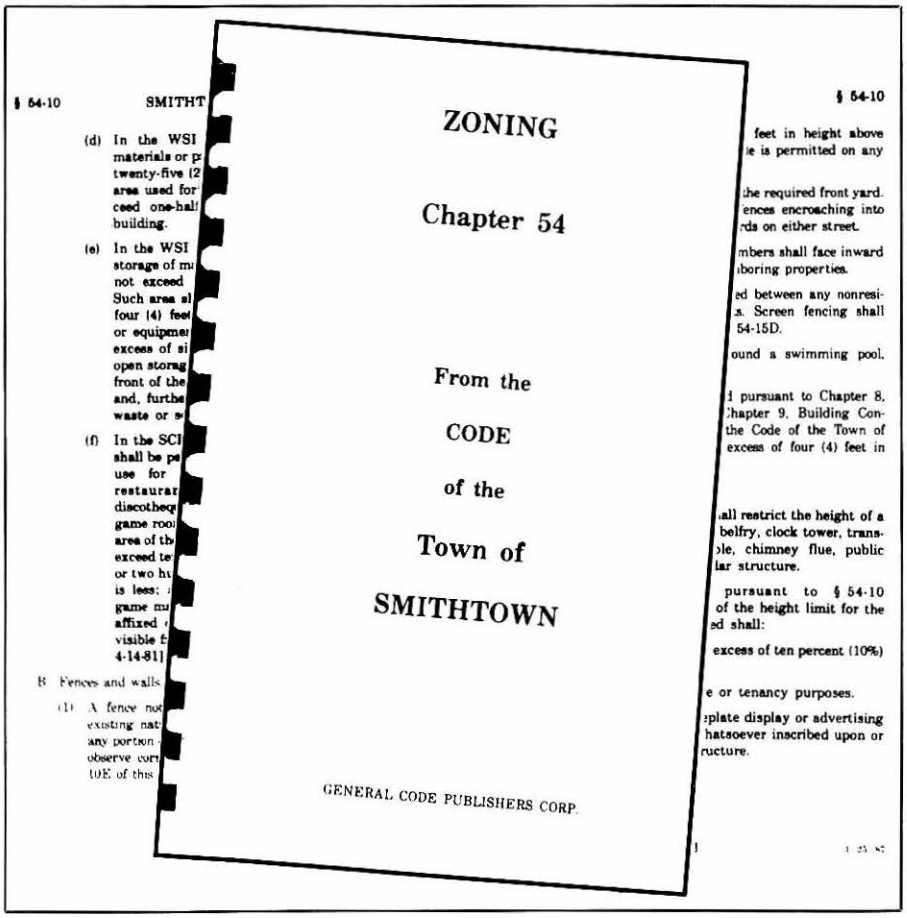
Do not be intimidated by the thought of going to the local government officials for a permit. Virtually all ham radio operators who own the physical area necessary for safe installation of a ham radio tower should be able to erect legally a tower of *some* size. Here are the steps to take to enhance the chances of you getting as much tower as you wish.

Information Gathering.

Because regulations pertaining to antennas and the way in which building and zoning departments process permit requests vary from town to town, the first, and most important step is information gathering. This means either a visit or a phone call to your local building or zoning department to obtain a copy of the zoning ordinances. Do not settle for anything less than the whole booklet of regulations! If the clerk or secretary offers to photocopy for you only the pages that pertain to antennas, keep in mind the sections mentioned, and thank him or her. But then insist on the *entire* booklet.

If you settle for anything less, you are relying on an interpretation by a secretary or clerk whose words may not be binding on the building department. If you don't believe me, try to get the statements made by a clerk in writing and signed. There is a charge for the booklet, of course, and it normally ranges between $5 and $15.

You should get the whole booklet because you need to know a lot more than just the sections under which the town regulates antenna heights. You will need



This booklet contains the local zoning codes and rules for Smithtown, NY. It was purchased for $10 from the town office. An addendum came with it listing all changes made since the printing.

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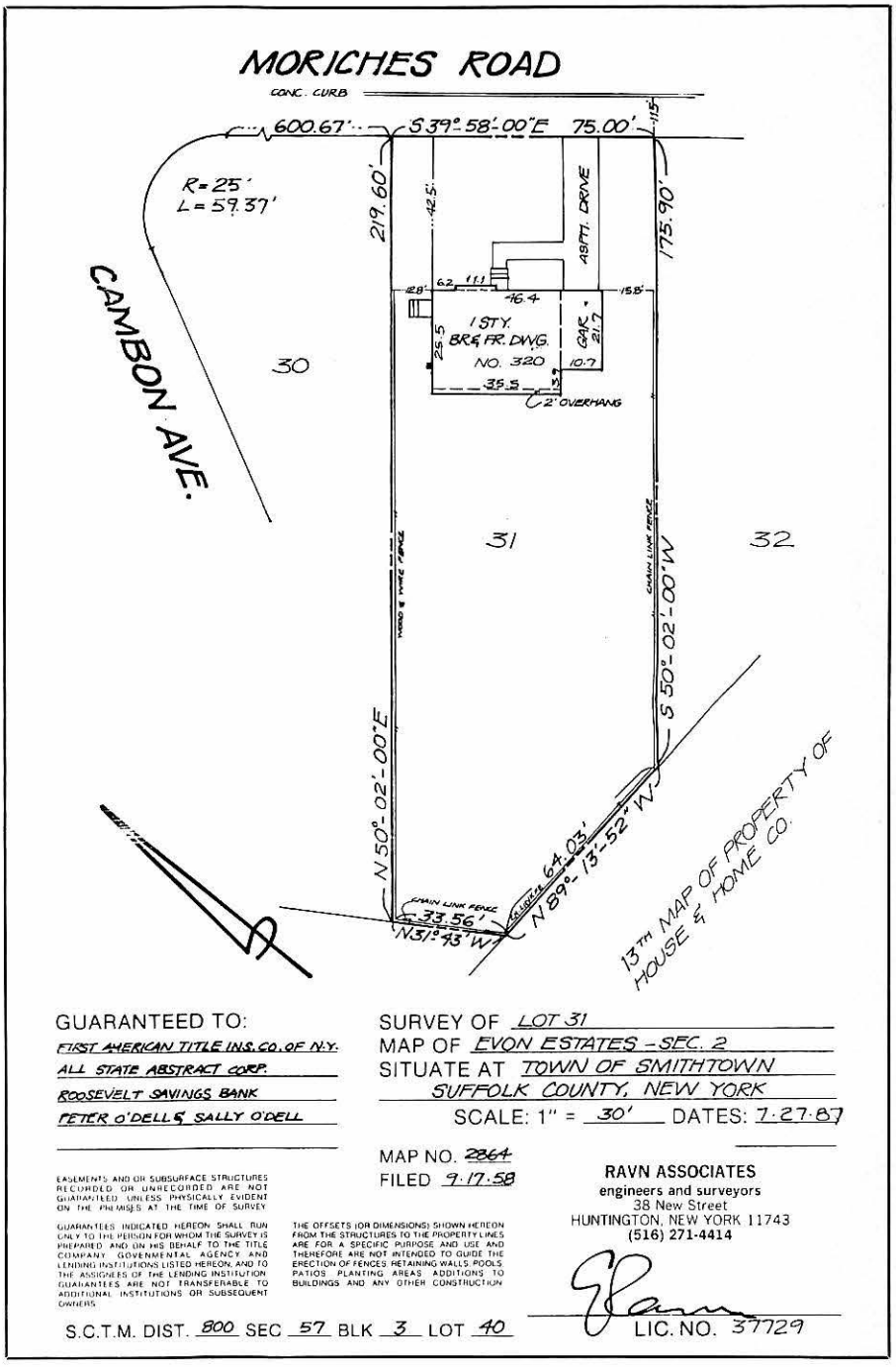
to know what procedures are followed when applying for a permit. You will also need to know how to appeal an adverse decision if you do not get a favorable ruling from the building inspector on the first try. Furthermore, if ever you need to seek the advice of a lawyer, the first thing he or she will need to see is the entire body of regulatory law affecting land use regulations for the town. Therefore, obtain the entire book of zoning regulations *now*, and take it home and study them.

What Are Zoning Rules

Zoning regulations are rules that establish the uses permitted and the minimum and maximum dimensional requirements of structures in established areas or "zones." Ninety-nine percent of the time the ham operator will want to put the antenna/tower at his home, which is located in a residential zone. Since the overwhelming majority of jurisdictions hold amateur radio to be a normal, accessory (as opposed to primary) use of residential property, it is proper in a residential zone. Similarly, swimming pools, tennis courts, garages, tool sheds and other such structures are accessory structures for accessory uses of residential property.

But in addition to "use" rules, zoning regulations also establish rules as to how high structures are permitted to be. You may find your proposed antenna/tower being held to the same height standards as other "buildings" or "structures" permitted in a residential zone. Read the definitions section in the pages near the beginning of the zoning ordinances. Sometimes the definition of "building" is broad enough to include an antenna/tower. Or antennas may be defined specifically. If the regulations do not define antennas specifically, see if mention is made of "accessory structures" and read the definition to see if antennas are included in that definition. You may find a section that defines flagpoles, church steeples and similar "structures" in language that could easily apply to towers.

The municipality may also be concerned about building codes. Do not confuse them with zoning requirements. Building codes are standards related to safety that have been agreed upon by engineers from the architectural, structural, civil and other engineering disciplines. Once the building inspector determines that your antenna/tower is proper and would not violate the zoning regulations pertaining to use and dimensions, your construction must still be done in accordance with building codes. Fortunately, this is rarely a problem. Tower manufacturers provide detailed specifications and plans for proper installation in accordance with all building codes.


MORICHES ROAD
CONC. CURB
600.67'
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L = 59.37'
219.60'
42.5'
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30
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NO. 320
25.5
GAR. 21.7
10.7
35.5
2' OVERHANG
31
32
CHAIN LINK FENCE
S 50° 02' 00" W
N 50° 02' 00" E
64.03'
N 89° 13' 52" W
33.56'
N 31° 43' W
13TH MAP OF PROPERTY OF HOUSE & HOME CO.
GUARANTEED TO:
FIRST AMERICAN TITLE INS. CO. OF N.Y.
ALL STATE ABSTRACT CORP.
ROOSEVELT SAVINGS BANK
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SURVEY OF LOT 31
MAP OF EVON ESTATES - SEC. 2
SITUATE AT TOWN OF SMITHTOWN
SUFFOLK COUNTY, NEW YORK
SCALE: 1" = 30' DATES: 7-27-87
MAP NO. 2864
FILED 9-17-58
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GUARANTEES INDICATED HEREON SHALL RUN ONLY TO THE PERSON FOR WHOM THE SURVEY IS PREPARED AND ON HIS BEHALF TO THE TITLE COMPANY, GOVERNMENTAL AGENCY AND LENDING INSTITUTIONS LISTED HEREON, AND TO THE ASSIGNEES OF THE LENDING INSTITUTION. GUARANTEES ARE NOT TRANSFERABLE TO ADDITIONAL INSTITUTIONS OR SUBSEQUENT OWNERS
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LIC. NO. 37729

Here's an example of the kind of plot map that you may need to take with you to the building department. A survey map such as this is often required for the sale of property, so check the paperwork your lawyer gave you when you purchased your property.

See The Building Inspector.

After you have had a chance to study the regulations, you probably have some idea of which regulations apply to your proposed installation. If the clerk or secretary pointed out certain sections, you should look at those sections to see if you agree. The regulations, when read in the context of your proposed antenna installation, should be understandable.

If the regulations are entirely lost on you, however, *now* is the time to consult a lawyer! But if you feel confident and have familiarized yourself enough to be able to carry on an intelligent conversation about the regulations, you should call and make an appointment to see the building inspector. You should be prepared to discuss the proposed location, height, and purpose of the structure, and you should take along the basic engi-

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OF THE TOWN OF SMITHTOWN CONCERNING
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ON Feb 21, 1989 AT 8 P.M. AT THE SMITHTOWN
SENIOR CITIZEN CENTER 420 MIDDLE COUNTRY ROAD, SMITHTOWN

If you must go before the ZBA for a variance, usually you will be required to notify your neighbors by mail and post a sign in your front yard.

neering data that is provided by the tower manufacturer to satisfy any building code concerns. Take along a rough drawing of your property that shows the locations of your boundary lines, the house and other buildings, and the proposed location for the tower.

The building inspector, much like the policeman walking the beat, is the first interpreter of the zoning laws. What he says will be the first indication of the steps you will have to take in order to get a permit for your installation. After you present your proposal, be sure to listen carefully to what the building inspector says. Building inspectors often are willing to be helpful and give you your permit, provided you follow the correct application procedures. For example, you may need to file a map of your property drawn to scale.

If the building inspector starts to say something negative, let him finish, and be sure that you understand his reasoning. Even though his reasoning may be wrong, *listen* to it and thoroughly understand the basis for his opinion. Effective opposition to an adverse position taken by the building inspector will be possible only if you follow this vitally important step.

At no time do you wave a copy of PRB-1 in the building inspector's face and proclaim that "federal law orders that you have to give me the permit." First of all, he's not going to know what you're talking about. Second, he's not likely to make a snap decision about something on which, if he is wrong, could result in a reprimand and possible loss of his job. If you're going to talk legal issues, he's going to want to talk to his lawyer, who is, of course, the town attorney.

Special Permits or Special Uses

In many situations the building inspector will have the authority to grant the permit without the involvement of any other official or board. However, depending on how your local town's ordinances are written, it may be necessary for you to seek the permission of a zoning commission or other land-use board. Most often this means that the zoning regulations are set up so that in order to exceed the "usual" height restrictions you need to apply for a special permit. This simply means that the drafters of the zoning ordinances decided that certain uses or structures can be permitted only after a public hearing and demonstration of special need.

While this undoubtedly means more red tape and delay for the ham operator, such a requirement in and of itself is not illegal in the eyes of the law, including the FCC's PRB-1 Preemption Order (which is discussed later). It does provide a forum for potential opposition from neighbors, however, and preparation for the hearing is all-important.

If There's A Problem

If there is a problem, it will be one of two varieties. It may be a matter of interpretation of the ordinance by the building inspector. Or the ordinance may be written in such a way that there is no way he could reasonably come up with any other interpretation. *If the ordinance is prohibitive under any reasonable interpretation, you should immediately seek the advice of a lawyer.*

If the problem is that you disagree with the building inspector's interpretation of the zoning regulations, that is not as serious. While you ultimately may need a lawyer to resolve the issue, you can still carry the issue yourself a little further. Tell the building inspector that you have a different interpretation, and ask him for his comments. See if you can narrow it down as to where the problem lies.

If it is a problem with the way in which the ordinance is written, i.e., under no possible interpretation can you get your permit, that is the more serious problem. It may mean that the ordinance is illegal, and therefore, invalid. The town officials won't like that, and they are more apt to fight vigorously against having their ordinance invalidated. They would much rather change an interpretation for a particular situation than scrap their ordinance.

If you run into an unresolvable problem with the building inspector, you should then, as a last resort, tell him about PRB-1. As already mentioned, however, more often than not you will find that it does not help at the building inspector level. At most, all you can get across is that the Federal government, through the Federal Communications Commission, has acted in this area under a Preemption Order called PRB-1. You can say that local governments cannot prohibit antenna towers, nor can they unreasonably restrict them in terms of size and height. However, it is best not to get into a lengthy discussion of the nuances of the legal doctrine of Federal Preemption with the building inspector.

The Appeal

If there is a reasonable interpretation of the regulations under which you should be allowed to put up the antenna/tower, you can usually appeal that decision to the Zoning Board of Appeals (ZBA). The procedure for appealing a ruling by a Building Inspector (sometimes called the "building official" or "zoning enforcement officer") will be outlined in the regulations. Basically, you are given a chance to explain what amateur radio is and to present your alternative interpretation that would permit you to erect your antenna installation.

PRB-1 should be used to persuade the ZBA that they should adopt your more reasonable interpretation because Federal law requires them to adopt as reasonable an interpretation as possible. If there is no possible interpretation of the zoning regulations, then the ZBA should be told that PRB-1 is a binding Federal regulation that supercedes their own law

if there is a conflict. Their interpretation of their own zoning ordinances should be guided by the binding order that was made by the FCC in PRB-1.

The heart of PRB-1 is comprised of only a few sentences, and their importance justifies their being quoted here: "Upon weighing these interests [state vs. federal interests] we [the FCC] believe a limited preemption policy is warranted. State and local regulations that operate to preclude amateur communications in their communities are in direct conflict with federal objectives and must be preempted." *Amateur Radio Preemption,* 101 FCC2d 952, 960 (1985) . . . "We [the FCC] will not, however, specify any particular height limitation below which a local government may not regulate, nor will we suggest the precise language that must be contained in local ordinances, such as mechanisms for special exceptions, variances, or conditional use permits. Nevertheless, local regulations which involve placement, screening, or height of antennas based on health, safety, or aesthetic considerations must be crafted to accommodate reasonably amateur communications, and to represent the minimum practicable regulation to accomplish the local authority's legitimate purpose." *Id.*, 101 FCC2d 952, 960 (1985).

PRB-1

Credit is due the American Radio Relay League for a long-fought battle to get the FCC to take a stand against overly-restrictive regulation of amateur radio antennas and towers and by persuading it to adopt PRB-1. However, as you can see from the above-quoted passage from PRB-1, which is the "heart" of the preemption order, PRB-1 has its limitations. It holds that no municipality may prohibit amateur radio communications. It also says that state or local regulations restricting amateur radio antennas must do so in the least restrictive way while still accomplishing its legitimate goals.

In other words, the local regulations cannot regulate so that there is "overkill." But make no mistake about it, state and local governments can, under the specific language of PRB-1, regulate antennas for reasons of health, safety and welfare. But, they have to be reasonable.

Safety, Aesthetics, and Property Values

So let's get back to the local building inspector or board. The first thing to do is to make sure that you can establish the proposed antenna and tower's safety. On matters of safety, there can and should be no compromise by the municipality. If the installation does not meet building code requirements, no board or court will allow it because safety is at stake. The manufacturer's specifications must be followed.

On the other hand, aesthetics and welfare, particularly the effect on the surrounding property values, are more likely to be areas of compromise by the municipality. Your task is basically three-fold. You have to demonstrate your *need* for the proposed antenna and the *safety* of the structure, and you have to show that you have taken reasonable steps to *lessen the impact on surrounding property.*

The ARRL has several helpful papers and pamphlets. The materials include a summary and collection of legal cases from around the country. Also, if you need help establishing need for the height of your antenna, the League may be able to help you establish the relationship between antenna height and the effectiveness of communications. Finally, there is a list of "volunteer counsel," attorneys who are ham radio operators and are willing to provide an initial consultation to the ham radio operator free of charge. There may be a volunteer counsel near you. At the very least, you should obtain these materials to help you prepare for a hearing. The contact at ARRL is the Regulatory Information Department, ARRL Headquarters, 225 Main St., Newington, CT 06111. Tel. 203-666-1541.

If you haven't already done so, try to gauge the opposition of the neighborhood prior to a hearing. Be prepared to answer all reasonable questions. While radio frequency interference (RFI) matters do not fall under the jurisdiction of the local zoning board, your reaction to questions about RFI might be used by the zoning board members to judge your character, which could form the unwritten and unstated basis for a denial. A zoning commissioner is more likely to give the benefit of the doubt to someone who sounds like a responsible good neighbor.

If a neighbor is concerned about RFI, one of the most effective statements that can be made is to explain that, while years ago the home-brew nature of ham stations may have resulted in some hams being responsible for some radio frequency interference problems, that is hardly the case today. Today, the level of amateur radio sophistication is such that RFI is rarely a problem, and when it is, the fault lies with the device that is experiencing the interference. This has been borne out so often that in 1982 the U.S. Congress passed a law, Public Law 97-259, that gave the FCC the exclusive jurisdiction over matters of radio frequency interference to home electronic devices.

The FCC has the expertise to deal with such matters, and you then explain to the zoning board members that you would work with the neighbor and the FCC so that they (the zoning board members) would not be shouldered with that problem in the rare event RFI occurs.

In Some Cases, a Tower is Impossible

Of course, there are some circumstances under which it is legally impossible to erect a tower. Condominium owners are a prime example. A condominium owner "owns" only that which exists within the confines of the four walls that form his unit. The rest of the building and the land are either owned by someone else, or they are owned in common by all the unit holders. Unless you can persuade the condominium association to allow you to put up an antenna in a common area, you had better bone up on so-called invisible antennas or limited space antennas in attics or crawl spaces above the ceiling. You cannot expect to be able to erect a tower on land or a building that you do not own outright. You need the permission of the owner(s).

Private restrictions, commonly called "CC&Rs," which stands for covenants, conditions and restrictions, are another aspect of antenna/tower regulation that has nothing to do with the government officials. These are the "fine print" that may be referenced in the deed to your property, especially if you are in a planned subdivision that has underground utilities. Your best bet before proceeding with your plans is to take a copy of your deed to an attorney to have a limited title search done for the specific purpose of determining whether private restrictions will affect you.

Land Ownership Rights and the Local Government

With respect to governmental, as opposed to private restrictions, it all boils down to one simple fact. Any ham radio operator, provided he or she has a federal license and the private property rights to a sufficiently sized parcel of land, has the right under federal law to erect a tower and antenna subject to the "reasonable" regulation of the local or state government. The big question, of course, is what is "reasonable?"

A substantial amount of money has been spent on attorneys fees' by a few hardy ham souls who have mortgaged their fortunes, their future, and their sacred honor in attempts to have courts tell local governments that their building inspectors' and boards' idea of reasonable is not reasonable under the preemption order of PRB-1. Sometimes a clash cannot be avoided. Pages and pages of words have been written by lawyers and

judges to explore the legal nuances of limits of PRB-1. But if you are like most ham operators, you want to know how best to go about putting up the highest tower you can without getting into a big legal hassle.

Emphasis from the start should be on the more practical aspects of planning a successful campaign for getting the necessary approvals for the tower. First, be realistic about the physical limitations of your parcel of land. Second, go on an information-gathering mission at the local town hall/building department to see which officials and which regulations are applicable to your proposed antenna installation. Third, discuss your plans with the local building inspector.

Determine whether the building inspector's interpretation of how the rules will apply to your plans is fair or should be

Glossary Of Terms

Accessory Use, Building or Structure: A subordinate use, building or structure customarily incidental to and located on the same lot occupied by the main use, building or structure. In a residential zone the house would be the main building, and its use as a residence would be the main use. Garages, swimming pools, tennis courts, and amateur radio antennas are examples of accessory structures.

BOCA Code: A set of engineering standards for structures established by the Building Officials & Code Administrators International, Inc., a non-profit standard-setting group based in Illinois. Many states and towns base their own state or town building code on the BOCA code, with some variations.

Building: The word "building," as used in local zoning and building regulations, can mean more than what common-sense tells you. The "definitions" sections of some regulations will define building in such a way as to include antennas and other structures. If you find that the height limitations apply only to "buildings," check the definitions section before you conclude that it doesn't apply to antennas.

Building Code: The regulations that deal with the engineering, safety and integrity of structures. Wind-loading standards are part of the building code.

Building Inspector: The part-time or full-time employee of the municipality who interprets whether your proposed construction conforms with the zoning regulations and building code. His interpretation can be appealed (usually to the Zoning Board of Appeals). If the decision challenged is only with respect to the building code, however, appeal may be to a different board, usually called the Building Board of Appeals. Larger towns may have a Zoning Enforcement Officer (ZEO, see below), leaving the Building Inspector to deal only with building code enforcement. Also, don't be surprised if there are multiple building inspectors for the electrical and structural aspects of your proposed antenna.

Building Permit: Once your plans have been reviewed, you are given the "go-ahead" in the form of a building permit. The permit is usually displayed on the construction site. Inspections can occur at any stage of construction.

Covenants: Private restrictions that were placed on the land records by a previous owner (usually the subdivision developer) that can control everything from how many cars you may park in the driveway to whether or not outdoor antennas are permitted. The covenants are held to be a private matter between the lot owner and the other owners in the neighborhood for whose benefit the restrictions purportedly were adopted. Covenants are also known as "CC&Rs", which stands for covenants, conditions and restrictions. A title search by an attorney before purchase of the lot is the best way to avoid these problems.

Exception: See Special Exception or Special Use Permit.

Height restrictions: Usually, height restrictions are imposed by a chart of minimum dimensional requirements. Other sections of the regulations may provide for exceptions to the chart. Look for a distinction to be made between primary buildings and accessory structures because permitted heights for accessory structures may be different. Also, the regulations may provide that cupolas, flagpoles, antennas, and similar structures are exempt from the height requirements.

Planning Commission (sometimes a combined Planning and Zoning Commission): A land-use board that is charged with recommending changes in the districting of zones. It may be charged with approving subdivision proposals. These functions may be combined into one board with the Zoning Commission functions. Consult your zoning regulations to determine the exact function of each of the following boards: Planning Commission, Zoning Commission, (a combined Planning and Zoning Commission), and Zoning Board of Appeals (ZBA).

Plot Plan: A drawing showing the property or lot, the structures presently erected on it, and the location of the proposed antenna structure. Dimensions from structures and boundaries are usually required to be indicated. Some regulations require that the drawing be accurate and drawn by a certified surveyor. Before spending money on a surveyor, consult the regulations or building inspector to determine how precise the plot plan has to be.

PRB-1: A declaratory ruling by the Federal Communications Commission that imposes a duty on state and local governments to (1) not prohibit amateur radio communications within their municipalities and (2) be reasonable in their regulations to the extent that the restrictions imposed on amateur radio antennas constitute the minimum practicable regulation necessary to achieve the municipality's legitimate goals of providing for the health, safety and welfare of the community. Amateur Radio Preemption, 101 FCC2d 952 (1985).

Preemption: A legal term that indicates that one law takes priority over another law. By the Supremacy Clause of the U.S. Constitution, federal law takes priority over state or local government when there is a conflict.

Special Exception, Special Use Permit, or Conditional Use Permit: A permitted use in a zone, but one which is not automatically permitted. In other words, the zoning regulations require that the applicant demonstrate special need or meet other requirements to the satisfaction of the Zoning Commission. However, the land-use board that passes judgment on these may be a board other than the Zoning Commis-

challenged. Fourth, if you are dissatisfied with the local building inspector's interpretation, obtain information from the ARRL and seek legal advice from an attorney as to whether there is any reasonable interpretation of the regulations that would permit you to put up the antenna/tower. If there is no reasonable interpretation of the ordinances as they stand, then you need to seek either a variance from the regulations itself or make a frontal assault on the ordinance as being in violation of PRB-1. Once you get into this area of the law, legal advice is a necessity.

sion, e.g., the Planning Commission or the Zoning Board of Appeals. Consult your zoning regulations to find out what the particular scheme is in your town. It is not unusual for zoning regulations to require a special exception, special use permit or conditional use permit for an antenna. Such a requirement is not illegal *per se*. However, PRB-1 requires that any restrictions imposed be reasonable.

Structure: The definition of "structure" may exclude such things as cupolas, belfries, antennas or other things that normally extend above the roof line. Look for the height limitations imposed on structures or buildings and then determine whether there are any exceptions to these height limitations. Also, see "Building" above.

Variance: A mechanism whereby one can obtain special relief from the zoning regulations. Usually granted by the Zoning Board of Appeals (ZBA), the applicant must show practical difficulties or unnecessary hardship. The difficulty or hardship usually may not be self-imposed, which automatically renders the amateur radio operator ineligible for the variance. (But for the fact that the ham operator wants to construct the antenna, there would be no hardship, or so the reasoning goes!) There are two kinds of variances: Use Variances and Dimensional Variances. The kind sought by amateur radio operators are almost always dimensional, which means that you want a variance from the height or set-back requirements imposed by the zoning regulations. Some states distinguish between the two kinds by making it easier to qualify for dimensional variances. Other states make no distinction.

Volunteer Counsel: A list of ham radio operators who are attorneys and who have registered with the ARRL as willing to provide an initial consultation free of charge to League members. Contact: ARRL Hq., Regulatory Information Department, 225 Main Street, Newington, CT 06111.

Zone: A district indicated on the zoning map that provides for a uniformity of regulation for that particular area. It is important to determine into which zone your property lies. For example, one type of residential zone may be more lenient by permitting higher structures than another type of residential zone.

Zoning Board of Appeals (ZBA): The land-use board usually charged with hearing applications for variances and appeals from the interpretation of the building inspector or zoning enforcement officer (ZEO). In other words, when a building inspector or ZEO is believed to have incorrectly applied the regulations to a proposed antenna structure, the appeal is made to the ZBA.

Zoning Commission (sometimes a combined Planning and Zoning Commission): The land use board that established the various zoning districts and zoning regulations and hears applications for changes in the zoning maps and regulations. It sometimes hears applications for special exceptions, depending on the regulations' particular organization. The Town Council or Board of Selectmen may not have delegated this law-making power to the Zoning Commission, in which case the Town Council or Zoning Commission makes the decisions as to what the regulations are or ought to be.

Zoning Enforcement Officer (ZEO): A full-time or part-time employee of the municipality who is responsible for interpreting the zoning regulations and deciding whether the particular structure or building proposed is allowed in the particular zone. Often the duties of the ZEO are rolled into one person, the Building Inspector, who then handles the questions of both the appropriateness for the zone and compliance of the plans to the building code. The decisions regarding zoning are appealable to the ZBA. Decisions regarding the building code, however, are usually, appealable to a special board usually called the Building Board of Appeals.

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